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10/588,712	08/08/2006	Wolfgang Fischer	W1.2278 PCT-US	1992

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EXAMINER
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KRUER, STEFAN

ART UNIT	PAPER NUMBER
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3654

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08/18/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/588,712	FISCHER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Stefan Krueer	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 27, 29 - 36, 39 - 45 and 49 - 52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27, 29 - 36, 39 - 45 and 49 - 52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

**Claim 27** is objected to because of the following informalities:

- Line 29 (in paragraph commencing with “operating said first web...”), “means” of “web threading means drive motor” in should be written as “belt”,
- Line 44 (in paragraph commencing with “setting said regulated...”), “resisting” should be written as “holdback” or “holding back” for antecedent basis.

Appropriate corrections are required.

### ***Specification***

The abstract of the disclosure is objected to because the amended language with respect to “... a constant retaining torque” that has been amended as “... a constant retaining, holdback or resistance torque” is more properly expressed as “... a constant retaining (as in holding back or resisting) torque”. In that the terms “holdback” and “resistance” were, as understood, introduced to give grater clarity to the modifier “retaining” and not as an alternative to said modifier, whereby each alternative could elicit a unique scope. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 27, 29 – 36, 39 – 45 and 49 – 52** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehrieder (US 7,243,827, previously published under WO 02/090650) in view of Kenichi (JP-63235240) and in further view of Rosen (3,586,221).

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Re: **Claims 27 and 43**, Lehrieder discloses a method for threading a material web (Col. 1, L. 55 – 57 & Col. 3, L. 18 – 22) in a printing press (01, Fig. 1, Col. 1, L. 21) including:

- providing at least a printing unit (02, 03) in said printing press;
- providing a web receiving area (04, 06, 07, Col. 4, L. 32 - 38) in said printing press and before, in a direction of web travel, said printing unit;
- providing a web delivery area (08, 09, 11, Col. 3, L. 28) in said web processing machine and after, in a direction of web travel, said printing unit;
- providing a web threading path (defined by 22 of 12, Col. 3, L. 33 & 41 - 45) extending in said direction of web travel between said web receiving area and said web delivery area and through said printing unit in said printing press;
- providing a web threading belt (12, “spring steel tape 22... in a layer of plastic...”) adapted for receiving a leading end of said web material (Col. 1, L. 25 & 58 – 61, Col. 2, L. 8 – 14, Col. 5, L. 5 - 7);
- attaching said leading edge of said material web to said web threading unit (Col. 4, L. 27 – 28);
- using said web threading belt for threading said leading end of said material web through said printing press from said web receiving area to said web delivery area during movement of said web threading belt in a web threading direction during a web threading operation of said printing press;
- providing a first web threading belt drive motor (Col. 4, L. 31 – 37) at said web receiving area and a second web threading belt drive motor (17) at said web delivering area, said first- and second web threading belt drive motors selectively operating for driving said web threading belt in said direction of said web travel and against said direction of web travel (Col. 4, L. 31 – 37);
- operating said first web threading belt drive motor in said web receiving area for applying a predetermined motor torque (Col. 4, L. 31 – 37 in view of Col. 2, L. 23 – 32) from said first web threading belt drive motor to said web threading belt during said web threading operation of said threading belt for resisting said movement of said web threading belt and said attached material

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- web through the printing press, and including said printing unit in said direction of web travel;*
- operating a second motor in said web delivering area **for** applying a regulated web threading speed (Col. 1, L. 65 – Col. 2, L. 2 & L. 23 – 32 + Col. 4, L. 31 – 37), from said second web threading belt drive motor to said web threading belt during said web threading operation of said threading belt and said attached material web through said printing press and including said printing unit in said direction of web travel;
  - setting said regulated motor torque of said first web threading belt drive motor and setting said regulated web threading speed of said second web threading belt drive motor (inherent to description derived from columns and lines numbers referenced above with respect to operating a second motor, whereby the web receiving area has a reel onto which the web threading belt can be rewound and unwound - hence a first web threading belt drive motor - and the web delivery area has driven reel(s), whereby the reel(s) "... can thus be driven in a controlled manner at different rotational speeds and/or torque... however, ... the electric motor can also be correspondingly controlled with respect to a speed..." ) ; and
  - at least one mechanically independent assembly (Col. 1, L. 7 - 9) in said web processing machine and a machine control (Col. 4, L. 39 - 64) *usable* to provide speed relevant signals to said one of said first and second motors;
  - maintaining a constant tension (Col. 5, L. 5 – 7) in said material web during said web threading operation at a predetermined web threading speed; and
  - an electronic guide axis for said machine control and being usable to transmit said speed relevant signals (Col. 4, L. 45 - 52); and
  - though Lehrieder reviews pushing his threading means through his printing press and said included printing unit (Col. 2, L. 51 - 65), as well as having first- and second web threading belt drive motors as said respective web receiving and web delivery areas, wherein said motors can be controlled for

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constant speed and/or torque, wherein said constant torque can alternatively be pre-set, Lehrieder is *explicitly* silent with respect to:

- using said second drive motor **by** pulling said web threading belt against said regulated motor torque of said first web threading belt drive motor, wherein said regulated motor torque is a “holdback” torque.

Attention is directed to Kenichi who teaches his web threading means (11- 25) comprising web receiving (16) and web delivery (13) areas wherein said web receiving area comprises a first motor (19) and said web delivery area comprises a second motor (18) , wherein said web threading comprises a web threading path (along 12) and said web threading means is adapted for receiving a leading end of a material web and maintaining a constant tension (Abstract), wherein Kenichi teaches operating his first motor operated at a regulated brake torque (in a rotational direction which is opposite to the unwinding direction) and his second motor at a regulated drive torque to impart "...a specified tension to the [belt] while the [belt] is ... unwound and wound..."

It would have been obvious to one of ordinary skill in the art to modify the reference of Lehrieder with the teaching of Kenichi to regulate said first and second motors in accordance with a respective braking torque and drive torque, respectively, wherein said braking torque affords a resistance (“holdback”) to a motor providing a drive torque, whereby said drive torque is based on a preset value dependent upon said brake torque, to provide uniform tension to a web threading belt and thereby uniform tension to a web material pulled by said threading belt in a printing press and through a printer for reduction in broke.

However, Kenichi is *explicitly* silent with respect to his second web threading drive motor being regulated for a pre-determined speed.

Attention is directed to Rosen who teaches his method of threading a material web wherein a first motor web threading drive means (“push motor”) is regulated at a predetermined motor torque and a second motor web threading drive means (“pull motor”) is regulated at a predetermined motor speed (Abstract, Col. 1, L. 65 - Col. 2, L.

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20) "... to prevent slack... at normal feed rates... and [to inhibit] ... undue stress on, and stretching or breaking of the [material web]..." (Col. 1, L. 29 – 34).

It would have been obvious to one of ordinary skill in the art to modify the invention of Lehrieder and Kenichi with the teaching of Rosen to utilize a push-pull or torque-control vis-à-vis speed-control of first and second motors of a threading means, therein "slave" and "master" motors when threading a material web "... in tandem motor systems...' for tension control ("... feeding at a uniform selected rate..."), whereby said second motor has a strength greater than that of said first motor to maintain a desired sheet tension in a "pull-direction" for the avoidance of broke.

In reference to the claim language referring to ***for** applying a predetermined motor torque from said first web threading belt drive motor to said web threading belt during said web threading operation of said threading belt **for** resisting said movement of said web threading belt and said attached material web through the printing press, and including said printing unit in said direction of web travel*, intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. In re Casey, 152 USPQ 235 (CCPA 1967); In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Re: **Claims 29, 44 and 51**, Lehrieder discloses a frequency converter and a calculating means (Col. 4, L. 45 - 64).

Re: **Claims 30 and 49**, Lehrieder discloses his second reel body (at either of 04, 06 &/or 07) and using said second motor for driving said second reel body for purpose of providing wound material and affording tension control independent of sheet/threading speed, and a first reel body (13) of his threading means upon which his threading means is wound.

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Re: **Claims 31 - 32**, Lehrieder discloses regulating at least one of his first and second motors based on a current diameter of his reel body (Col. 5, L. 1), wherein said regulation is via a target value of a frequency load (Col. 4, L. 63).

Re: **Claims 33 – 36**, Lehrieder discloses:

- regulating a current diameter of his reel body (Col. 5, L. 1),
- including determining said number of rotations of said reel body in said receiving area (Col. 2, L. 33 – 50), and
- including determining said number of rotations of said reel body in said delivery area (Col. 2, L. 33 – 50), respectively.

Re: **Claim 39**, Lehrieder discloses at least one rotary drive (understood) for at least one mechanically independent assembly (02, 03) in said web processing machine and controlling said first motor with respect to a control of said rotary drive and said first motor with each other (Col. 1, L. 61 – 67).

Re: **Claim 40**, Lehrieder discloses material web reel changer, said reel changer having a drive and controlling one of said first and second drive motors and said reel changer driver correlated with each other with respect to their speed by using a machine control (Col. 4, L. 52 - 57).

Re: **Claim 41**, Lehrieder discloses web processing machine having a reel printing unit and printing unit drive (understood) further including controlling said second motor and said printing unit drive with respect to each other by using a machine control (understood, in order to maintain web tension/speed).

Re: **Claim 42**, Lehrieder discloses servo control in terms of target and measured tension values for optimizing tension control of his web. (Col. 2, L. 33 – 50 & Col. 4, L. 62).

Re: **Claims 44 - 45**, Lehrieder discloses his target value for his predetermined threading speed and a signal connection between his second motor and a control unit (Col. 4, L. 45 - 57).



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Re: **Claims 49 - 51**, Lehrieder discloses:

- a first reel body (06) in said receiving area and a second reel body (13) in said delivery area (07), each of said first and second motors (Col. 4, L. 32 - 38) being adapted to drive a respective one of said first and second reel bodies,
- a rotation sensor on one of his first and second reel bodies (Col. 2, L. 37 and Col. 5, L. 19), and
- wherein said control device includes a calculating means usable to provide a frequency signal for said motor based on a predetermined threading speed and a number of rotations, respectively.

**Claim 52**, Lehrieder, Kenichi and Rosen disclose a control device *useable* to regulate said other of said first and second motors with respect to torque.

### ***Response to Arguments***

Applicant's arguments with respect to **Claims 27 and 43** have been considered but are not found to be persuasive.

The rejections of the previous office action were in response to the claim language. Applicant's arguments are *in part* based on the amended claim language applied to the prior art of record; consequently, this office action comprises a detailed response to Applicant's arguments.

With respect to Lehrieder not disclosing a first web threading belt drive motor, applicant is correct that such is not explicitly disclosed upon review of the operation of his belt drive motor of his web delivering area; however, Lehrieder does review the use of reel in his web receiving area, the use of change over reels commensurate with those of the instant invention, as well as a reel onto/from which his web threading belt is wound and unwound, though said reel is not depicted.

Consequently, though not explicitly disclosed in view of the invention as claimed, Lehrieder does disclose first- and second web threading belt drive motors, wherein said

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motors can be regulated for a constant speed and/or constant/preset torque, though Examiner agrees that the first web threading drive motor is not adequately disclosed.

Therefore, attention was directed to Kenichi who, despite applicant's assertion, does teach a "holdback" or braking torque commensurate with that of the instant invention, whereby Examiner viewed Kenichi as teaching first- and second web threading belt drive motors that co-operate in a manner similar to that of the instant invention, though Kenichi teaches his second web threading belt drive motor as operating at a constant torque rather than at a constant speed, whereby his first web threading belt drive motor offers a holdback torque.

Furthermore, applicant's statement with respect to his review of the disclosure of Lehrieder noting that "... the reel body 13 is not controlled in the way it was controlled in the first embodiment" applicant has construed Examiner's interpretation of the disclosure of Lehrieder as being fraught with the mixing of embodiments; however, Examiner has referenced excerpts from each with respect to their similar control of the belt drive motors only. Furthermore, the excerpt from the specification as referenced by applicant states that "the reel body also has a motor which, in this second embodiment, need not be controllable in the way of ... the first embodiment", whereby "need not" is not commensurate with "should not". Again, Examiner has reviewed the control of motor(s) in accordance with their relevance to the claimed invention.

Finally, with respect to Rosen, Rosen is cited for reference of teaching the resistance-pull effect as taught by Kenichi, whereby Rosen utilizes a push-pull in terms of Slave and master drives (again, similar to that of Kenichi) for the same rationale as Kenichi and Lehrieder – tension control – whereby, as reviewed, Rosen teaches the use of speed and torque control of his respective web receiving- and web delivering drive motors.

In summation, Lehrieder discloses the use of either torque or speed control of his first- and second belt drive motors, Kenichi teaches torque control of his first- and second belt drive motors, whereby his first drive motor is controlled for braking torque

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for purpose and benefit as that of the instant invention, and Rosen teaches the push-pull or torque-control vis-à-vis speed-control of his first and second threading drive motors, thereby "slave" and "master" motors "... in tandem motor systems..." for tension control as well.

Therefore, neither the original claim language nor the amended claim language overcame the rejections based on the prior art of record of the previous office action.

With respect to **Claims 29 – 36, 39 – 42, 44 and 49 – 52**, applicant has not argued the rejections; rather, applicant has reiterated the lack of anticipation and teachings of the cited prior art of record with respect to independent **Claims 27 and 43**.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen, can be reached on 571.272.6608. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

/shk/

Examiner, Art Unit 3654

13 August 2010

/Michael R Mansen/

Supervisory Patent Examiner, Art Unit 3654